

Title (en)

SYSTEM AND METHOD FOR HANDLING ERRORS IN A VEHICLE NEURAL NETWORK PROCESSOR

Title (de)

SYSTEM UND VERFAHREN ZUR FEHLERBEHANDLUNG IN EINEM NEURONALEN NETZWERKPROZESSOR EINES FAHRZEUGS

Title (fr)

SYSTÈME ET PROCÉDÉ DE GESTION D'ERREURS DANS UN PROCESSEUR DE RÉSEAU NEURONAL DE VÉHICULE

Publication

EP 4261743 A3 20231129 (EN)

Application

EP 23195052 A 20181116

Priority

- US 201715817005 A 20171117
- EP 18877535 A 20181116
- US 2018061677 W 20181116

Abstract (en)

A system for handling errors in a neural network includes a neural network processor for executing a neural network associated with use of a vehicle. The neural network processor includes an error detector configured to detect a data error associated with execution of the neural network and a neural network controller configured to receive a report of the data error from the error detector. In response to receiving the report, the neural network controller is further configured to signal that a pending result of the neural network is tainted without terminating execution of the neural network.

IPC 8 full level

G06N 3/04 (2023.01)

CPC (source: EP KR US)

G06F 11/0721 (2013.01 - US); **G06F 11/0739** (2013.01 - EP KR); **G06F 11/0751** (2013.01 - US); **G06F 11/0757** (2013.01 - EP KR);
G06F 11/0772 (2013.01 - KR US); **G06F 11/0793** (2013.01 - EP KR); **G06F 11/1438** (2013.01 - EP); **G06F 11/3006** (2013.01 - US);
G06F 11/3055 (2013.01 - US); **G06F 11/327** (2013.01 - US); **G06N 3/02** (2013.01 - US); **G06N 3/044** (2023.01 - KR);
G06N 3/045 (2023.01 - EP KR); **G06N 3/048** (2023.01 - KR); **G06N 3/08** (2013.01 - EP KR); **G05B 23/0289** (2013.01 - EP);
G06N 3/044 (2023.01 - EP); **G06N 3/048** (2023.01 - EP)

Citation (search report)

- [A] US 2007271014 A1 20071122 - BREED DAVID S [US]
- [A] KR 101706367 B1 20170214 - KONGJU NAT UNIV INDUSTRY-UNIV COOP FOUND [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10606678 B2 20200331; US 2019155678 A1 20190523; CA 3075820 A1 20190523; CN 111212775 A 20200529; EP 3710328 A1 20200923;
EP 3710328 A4 20210825; EP 3710328 B1 20231011; EP 4261743 A2 20231018; EP 4261743 A3 20231129; KR 102295601 B1 20210830;
KR 102378726 B1 20220328; KR 20200047670 A 20200507; KR 20210118899 A 20211001; KR 20220041954 A 20220401;
US 11132245 B2 20210928; US 11734095 B2 20230822; US 2020394095 A1 20201217; US 2022083412 A1 20220317;
US 2024086270 A1 20240314; WO 2019099941 A1 20190523

DOCDB simple family (application)

US 201715817005 A 20171117; CA 3075820 A 20181116; CN 201880066980 A 20181116; EP 18877535 A 20181116;
EP 23195052 A 20181116; KR 20207009698 A 20181116; KR 20217026896 A 20181116; KR 20227009369 A 20181116;
US 2018061677 W 20181116; US 202016834104 A 20200330; US 202117448598 A 20210923; US 202318452419 A 20230818